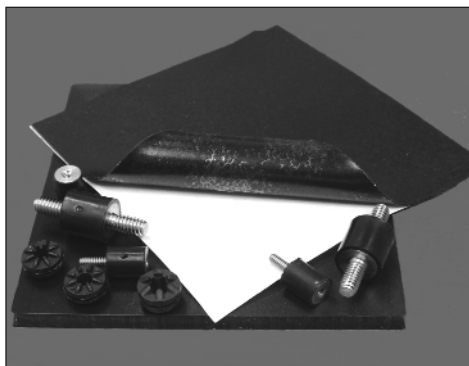


ISOLOSS® HD series damping and isolation materials



Product Applications

- Low compression set*
- Low outgassing*
- Low flammability*
- Flexible and conformable*
- Good long-term aging*
- Withstand temperatures to 107C*
- Compatible with most adhesive systems*

ISOLOSSHD Series materials, from E-A-R Specialty Composites, are tough, highly damped polyurethane thermosets. As sheets and molded parts, the materials provide high performance damping, isolation, and shock and motion control in more demanding electronic environments.

ISOLOSS HD materials achieve loss factors in excess of 1.0, ensuring unparalleled performance in highest-need applications. A fire-resistant formulation—HDF—also is available, to meet the needs of projects with UL94 flame requirements.

ISOLOSS HD series damping and isolation materials

Typical Properties		
Property	ISOLOSS HD	ISOLOSS HDF
Description	Urethane Solid	Urethane Solid
Normal Hardness ASTM D2240 Shore A Durometer Impact at 23C (73F)	58	61
Flammability UL94 1.5 mm (0.06 in) thick .76 mm (0.03 in) thick	Listed HB	Listed V-2*
Dynamic Properties Glass transition temp. C (F) Max loss factor at 10 Hz, 12C (54F)	-8 (18) 0.94	-8 (18) 0.95
Compression Set (%) ASTM D1667 22hr at 22C (72F) 22hr at 70C (158F)	4.5 6.1	4.3 7.0
Compression Load Deflection kPa (psi) ASTM D575 at 0.51 cm/min (0.20 in/min) 10% Deflection 20% Deflection 30% Deflection	565 (82) 1241 (180) 2103 (305)	531 (77) 1147 (166) 1964 (285)
Compression Modulus kPa (psi)	5826 (845)	5681 (824)
Tensile Strength kPa (psi) ASTM D638 51 cm/min (20 in/min) at 22C (72F)	15414* (2236*)	15995* (2320*)
Tear Strength kN/m (lb/in) ASTM D1004	27.5 (157)	28.3 (161.6)
Temperature Range C (F) Peak performance	13 to 41 (55 to 106)	10 to 40 (50 to 104)
Recommended Max. Intermittent	107 (225)	107 (225)

*Conducted on 30 mil molded sheet.

The data listed in this data sheet are typical or average values or engineering estimates based on tests conducted by independent laboratories or by the manufacturer. They are indicative only of the results obtained in such tests and should not be considered as guaranteed maximums or minimums. Materials must be tested under actual service to determine their suitability for a particular purpose.

E-A-R ISOLOSS HD & HDF
Dynamic Properties @ 10 Hz vs Temperature

